

# Green Concept: Customer Satisfaction in the Service Business

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**ABSTRACT:** This study aims to determine the factors that influence customer satisfaction. The research method used was quantitative. The sampling technique used purposive sampling with 96 respondents. The analysis technique in this study consisted of three stages, namely the first stage of the validity test, the second stage of the reliability test, and the third stage using SEM (Structural Equation Modeling) through SmartPls 3.0 software. The results of this study explained that environmental awareness had a significant effect on current green practices, current green practices had an influence on customer satisfaction, green perceived quality had no effect on customer satisfaction, green marketing had no effect on green perceived quality, and green marketing had no effect on customer satisfaction.

**Keywords:** green marketing, customer satisfaction, environmental awareness

## 1 INTRODUCTION

Surabaya has now become one of the largest cities in Indonesia ranks second as the largest city in Indonesia. The rapid development of Surabaya in the property sector is also inevitable with the growth of the property business from year to year (Ardianto, 2017). Hotel growth in Surabaya is in line with various developments in the East Java region, with data from the Culture and Tourism Office of East Java Province shown in Figure 1 below:

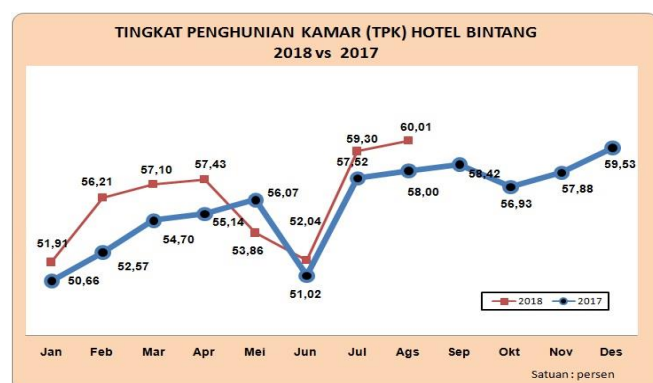


Figure 1. Hotel Growth in East Java

The figure shows that hotel growth in East Java is quite significant. When viewed from the number of hotels in East Java, Surabaya is a city that has the most hotels compared to other districts/cities. This is in accordance with the East Java Central Bureau of Statistics (BPS) data released on August 23, 2018, where as many as 189 hotels are located in Surabaya (BPS, 2018). However, the high number of hotels in Surabaya is not in line with hotel occupancy rates and targets. It was reported that in July 2017, the occupancy rate only reached 57.07 percent, even in June, it was only 51.10 percent (Rozack, 2017). The hotel industry is required to develop marketing strategies to create hotel guest satisfaction.

The high level of business competition becomes a challenge for marketers to promote their services. If the marketer is not able to see the opportunities available, the hotel will experience a setback and even face the possibility that the hotel will close. In business competition, visitors observed the Quds Royal Hotel on Jalan Sultan Iskandar Muda Surabaya is a "green hotel".

It is shown by the hotel facilities that have applied environmental care stickers inside or outside the hotel area, which can be upgraded through vid-eotron facilities that are more attractive to the envi-

ronment to increase hotel guest awareness further. However, visitors still use the facilities excessively, such as turning on the television and bathroom lights, even though they are sleeping. This reflects that visitors lack understanding about green hotels even though all humans have realized that environmental conditions are currently experiencing a decline in quality.

To support the concept of green hotels, it requires the application of marketing strategies through the concept of green marketing. The management of Quds Royal Hotel also paid attention to the level of visitor satisfaction. The level of visitor satisfaction is considered good, as evidenced by many old visitors returning to stay at the Quds Royal Hotel.

Based on the description of these problems, the research questions can be arranged as follows:

1. Does environmental awareness affect current green practices?
2. Do current green practices affect customer satisfaction?
3. Does green perceived quality affect customer satisfaction?
4. Does green marketing influence green perceived quality?
5. Does green marketing affect customer satisfaction?

### 1.1 Environmental Awareness

Environmental awareness is important in implementing the green concept in human activities. The awareness does not arise by itself, but it needs encouragement so that humans can understand the importance of environmental awareness to be able to save the earth and live peacefully with other creatures (Tam, 2016 and Omoogun et al., 2016). Green practices relate to how businesses are able to keep the environment from being damaged and stay healthy so that consumers (from the business) can be blessed (Sivamoorthy et al., 2013; Weng, Chen and Chen, 2015). Current green practices can be built well if there is an awareness of the environment in it. Without environmental awareness, it will not be able to run or maximize current green practices (Gayol, 2013). In this position, environmental awareness is used as a variable that influences current green practices in the hotel business.

H1: There is a significant and positive influence of environmental awareness on current green practices.

### 1.2 Current Green Practices

Green Practice is an environmental aspect that is institutionalized and follows ecologically sound programs such as water and energy savings as well as the reduction of solid waste and energy consumption (Fadhil, 2015). The idea of "green business" arises due to increased awareness of environmental problems such as the depletion of natural resources and the decline in environmental quality. Whereas, the practice of "green movements" can be traced to the mid-1960s, requiring almost 20 years for businesses to adapt to "green" trends and adopt them into ideology and implementation (Fadhil, 2015; Ogbeide, 2012 and Vlad, et al., 2016). Research conducted by Hsiao et al. (2018) also revealed that in current green practices, it is necessary to understand what is important for the survival of a company in order to be able to provide the best results and satisfy consumers who come. Customer satisfaction for current green practices will have a good impact on customer loyalty.

H2: There is a significant and positive influence between current green practices on customer satisfaction.

### 1.3 Green Perceived Quality

Product quality can be divided into "objective quality" and "perceived quality." Objective quality describes the technological superiority or features of the product using a specific size or expected standard. Perceived quality is based on the overall assessment of the product or service. The main reason for the difference between perceived quality and objective quality are: (1) influenced by consumers' pre-existing impressions, (2) consumers' perceptions of the quality dimensions differ from the manufacturer's dimensions, and (3) differences in information. Consumers fail to obtain comprehensive information, and thus make conclusions about product quality based on only one or two pieces of information (Chen, Lin and Weng, 2015 and Marakanon and Panjakajornsak, 2017). The quality of services provided by hotels to consumers will end up in the satisfaction and enjoyment of consumers while using the hotel services. This is in line with Chen, Lin and Weng, (2015) that said green perceived quality must understand what is needed by consumers. Understanding consumer needs will result in the formation of customer satisfaction (Chen et al., 2015).

H3: There is a significant and positive effect between green perceived quality on customer satisfaction.

#### 1.4 Green Marketing Concept

Green marketing is a new marketing strategy that includes various tasks and activities such as fair trade practices, product modifications, production processes, and environmentally friendly packaging. Green marketing consists of various activities such as the production process, product changes, packaging changes, and even changes in advertising. The purpose of green marketing is to meet the needs and desires of customers as well as to hold companies accountable for the long-term social and environmental benefits that can be obtained through green marketing (Fui Yeng and Yazdanifard, 2015; Zulfiqar and Shafaat, 2015 and Wu et al., 2016). Implementation of good green marketing practices will result in good green perceived quality by consumers.

H4: There is a significant and positive influence between green marketing practices on green perceived quality.

#### 1.5 Customer Satisfaction

Traditionally, customer satisfaction is considered as a determinant of customer behavior in the long run. Satisfaction is widely used to measure the relationship between consumers and businesses. While satisfaction shows the possibility of customers in repurchasing a product. Overall, satisfaction is defined as the emotional impact of a consumer product after they evaluate the use of their product (Chen et al., 2014; Yusnita et al., 2016 and Solomon, 2011). Dief and Font (2010) stated that green marketing must be done on target in order to be able to reach all the expected target consumers. In addition, when green marketing is maximized, it makes the organization more optimal in providing services to consumers.

H5: There is a significant and positive influence of green marketing on customer satisfaction.

## 2 RESEARCH METHODS

This study used a quantitative approach using a questionnaire as a data collection tool (Teddlie and Yu, 2007). It used a sampling technique is purposive sampling. To get maximum results, 96 respondents must meet several criteria, namely age must be between 18-50 years old, male and female, and have

stayed at the Quds Royal Hotel at least once in the past 6 months. Data obtained from respondents was then processed using SEM (Structural Equation Modeling) through SmartPLS 3.0 software to see the relationship of each variable. Through SEM, the author can perform three activities simultaneously, namely checking the validity and reliability of the instrument (equivalent to confirmatory analysis factors), testing the model of relationships between independent variables (equivalent to Path Analysis) and getting a model that is useful for forecasting (equivalent to the Structural Model or Regression Analysis) (Epskamp, 2015).

## 3 RESULTS AND DISCUSSIONS

### 3.1 Validity and Reliability Test

The valid score of a variable is if the score of  $r$  count  $> r$  table, with the score of the  $r$ -table used, is 0.3 (Creswell, 2014). The results of the validity test showed that the questions on each variable have a validity score above 0.3, which means the test results can be said to be valid and can be continued at a later stage. Validity test can be seen in Table 1.

Table 1. The Validity Test

Variable	Validity Results	Criteria	Remarks
Environmental Awareness ( $X_1$ )	0.355	$>0.30$	Valid
Green Perceived Quality ( $X_2$ )	0.434	$>0.30$	Valid
Current Green Practices ( $X_3$ )	0.414	$>0.30$	Valid
Green Marketing ( $X_4$ )	0.323	$>0.30$	Valid
Customer Satisfaction ( $Y$ )	0.501	$>0.30$	Valid

The reliability score is seen by using the Cronbach's Alpha standard; a variable is said to be reliable if the score  $\alpha > 0.7$ . Calculation results can be seen in Table 2.

Table 2. Reliability Test

Variable	Cronbach's Alpha	Criteria	Remarks
Environmental Awareness ( $X_1$ )	0.837	$>0.7$	Reliable
Green Perceived Quality ( $X_2$ )	0.894	$>0.7$	Reliable
Current Green Practices ( $X_3$ )	0.832	$>0.7$	Reliable
Green Marketing ( $X_4$ )	0.886	$>0.7$	Reliable
Customer Satisfaction ( $Y$ )	0.899	$>0.7$	Reliable

### 3.2 Outer Model Measurement

In the analysis phase, measurements were carried out towards the relationship between indicators and variables through the following criteria, Convergent Validity, Discriminant Validity, and Composite Reliability. Validation was done by looking at the Average Variant Extracted (AVE) value, as presented in table 3.

Table 3. Average Variance Extracted

Variable	AVE
Current Green Practices	0.226
Customer Satisfaction	0.338
Environmental Awareness	0.335
Green Marketing	0.241
Green Perceived Quality	0.344

After measuring the validity of each indicator in the variable, a discriminant validity test was then performed to see how far the correlation between variables. The results of the discriminant validity test can be seen in table 4.

Table 4. Discriminant Validity

AVE	Variable	$\sqrt{\text{AVE}}$				
		EA	GPQ	CGP	GM	CS
0.226	CGP	<b>0.475</b>				
0.338	CS	0.474	<b>0.582</b>			
0.335	EA	0.763	0.309	<b>0.579</b>		
0.241	GM	0.461	0.351	0.369	<b>0.490</b>	
0.344	GPQ	0.454	0.246	0.364	0.590	<b>0.586</b>

The next stage conducted in this study after the validation test was a reliability test of the research measuring instrument (questionnaire). Reliability test was done by looking at the value of Composite Reliability (CR) and Cronbach's Alpha which can be seen in table 5.

Table 5. Reliability Test

Variable	Composite Reliability	Cronbach's Alpha
Current Green Practices	0.841	0.822
Customer Satisfaction	0.734	0.613
Environmental Awareness	0.727	0.549
Green Marketing	0.529	0.585
Green Perceived Quality	0.510	0.200

### 3.3 Structural Inner Model Measurement

The test on this variable will explain the effect of the independent variable on the dependent variable that can be seen in the calculation of the R-square value in table 6.

Table 6. R-Squared of Independent Variables

Variable	R-Squared	Variability
Current Green Practices	0.582	58.2%
Customer Satisfaction	0.249	24.9%
Green Perceived Quality	0.349	34.9%

The R-squared value here is used to see the strength of the influence of the independent variable on the dependent variable, which can then be seen from the present value (variability) produced. Based on table 4.4, it is found that the R-squared value of the current green practices variable here is 0.582, which means that the current green practices are explained as much as 58.2% by environmental awareness variables while the remaining 41.8% is explained by other variables not described in the model.

### 3.4 Hypothesis Testing

The hypothesis testing found that two hypotheses were accepted and the other three hypotheses were rejected. The research hypothesis is accepted if the t-value is  $> 1.65$  and the value of  $p < 0.05$ .

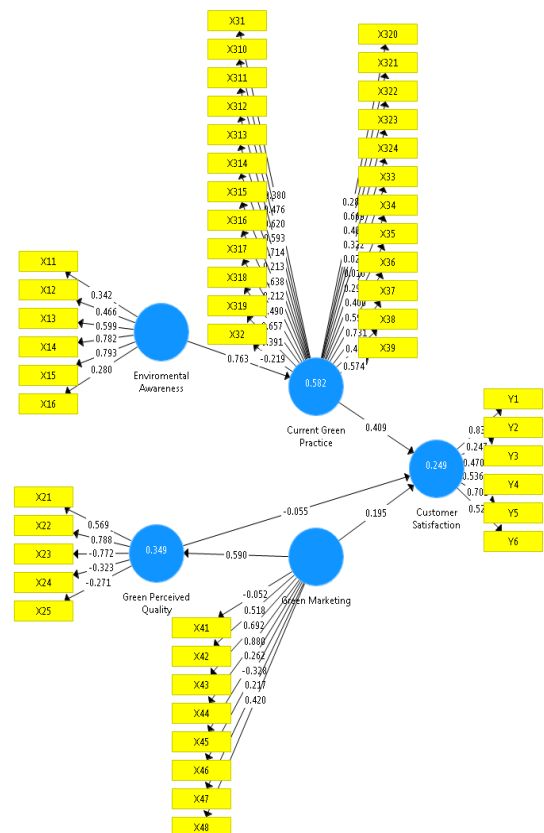


Figure 1. The Results of Structural Inner Model

### 3.5 Discussion

Environmental awareness had a significant effect on current green practices. The results of this analysis answer the first problem formulation, namely the effect of environmental awareness on current green practices. The results of the study are in line with the results of research conducted by Kularatne et al. (2018), which stated that the condition of the environment around the industrial site would affect the level of environmental awareness of the people around them. The results of this study are in line with research from Norazah and Norbayah (2014), which confirmed that an individual's environmental awareness arises after seeing or experiencing firsthand what is seen and felt. In other words, environmental awareness is related to current green practices that one person experiences directly at one time. This is confirmed by Sivamoorthy et al. (2013) that in carrying out the concept of "green hotel", the variable of current green practices will affect one's level of environmental awareness.

Current green practices had an influence on customer satisfaction. The results of this analysis answer the formulation of the second problem, namely the effect of current green practices on customer satisfaction. The results of this study are in line with research by Singjai, Winata and Kummer (2018), which stated that the actors of current green practices activities show a strong influence on customer satisfaction. Fadhil (2015), in his research, found a movement that requires collaboration between business owners and customers. This is due to green practices to strengthen the ecological dimension of the organization and they enable the development of behaviors that support the adoption of more complex programs.

The results of the analysis did not answer the formulation of the third problem, namely the effect of green perceived quality on customer satisfaction. This is in line with the results of research conducted by Wang et al. (2017), which stated that the average millennial is a reasonably selective generation, including in choosing products or services. Chih-Hsin Tsai's research confirmed that hotel guests' behavior is quite difficult to guess; in other words, even though hotel guests feel comfortable and say that the hotel has good quality, but they will not necessarily say they are satisfied with hotel services. This happens because the tendency to compare places to stay with each other continues to be done so that to provide an assessment of "satisfaction" is quite challenging to do (Chang, Tsai and Yeh, 2014). For this reason, in this study, the effect of green perceived

quality on customer satisfaction cannot be elaborated.

Green marketing had no influence on green perceived quality. This also applies to the opinions of Fui Yeng and Yazdanifard, (2015) about the tools used in green marketing, including eco-labels, eco-brands, and environmental advertisements, where these tools are still unable to guarantee a good response from consumers if then not appropriately set.

Green marketing had no effect on customer satisfaction. The results of this analysis did not answer the formulation of the fifth problem, which is about the effect of green marketing on customer satisfaction. The results of this study are in line with research conducted by Ogbeide (2012) and Slevitch et al. (2012), which stated that the discussion on customer satisfaction is a discussion that is abstract enough to form a measurement tool or its parameters. So using green marketing alone will not be able to see the extent of customer satisfaction with hotel services. Although in their research, Fui Yeng and Yazdanifard (2015) stated that a successful product is one that is able to meet customer satisfaction and will experience an increase in sales and revenue, it cannot be applied in reality. As expressed by Dief and Font (2010) which stated that in compiling a green marketing strategy, every aspect of customer needs becomes a matter that must be considered, but there is always a factor X that escapes the eyes of marketers, this is what always impedes and makes marketing is less than optimal. According to the findings of the study, respondents who mostly earned a bachelor's degree have experience and provide feedback about Qud's Royal Hotel that environmental awareness can affect the level of environmental awareness. Therefore, environmental awareness that has been implemented by Qud's Royal Hotel must be maintained or upgraded following the development of information technology. So far, Qud's Royal Hotel has implemented environmental care stickers inside or outside the hotel, which can be upgraded through environmental care videotron facilities that are more attractive to increase hotel guest awareness further.

Current green practices influenced Qud's Royal Hotel consumer satisfaction; this is according to the results of research that has been done. Current green practice requires collaboration between business owners and customers because green practices strengthen the ecological dimension of organizations in the hospitality industry and they enable the development of behaviors that support the adoption of more complex programs, such as environmentally friendly marketing strategies.



Therefore, Qud's Royal Hotel management should empower customers to foster a desire to collaborate in marketing products delivered by Qud's Royal Hotel. Moreover, the results of this research showed the dominant respondents from young adults to mature adults possess broad insight about environmental conditions and the application of the green concept in various service business practices, including hospitality.

#### 4 CONCLUSIONS

Environment awareness had an effect on current green practices (1). Current green practices had an effect on customer satisfaction (2). Green perceived quality had no effect on customer satisfaction (3). Green marketing had no effect on perceived green quality (4). Green marketing had no effect on customer satisfaction (5).

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